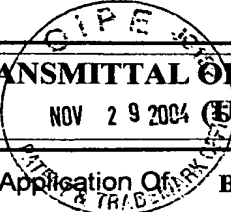


IFW



**TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT**

NOV 29 2004 (Under 37 CFR 1.97(b) or 1.97(c))

Docket No.  
MSU 4.1-596

In Re Application Of **Brage Golding, Connie Bednarski-Meinke and Zhong-ning Dai**

Application No.	Filing Date	Examiner	Customer No.	Group Art Unit	Confirmation No.
10/634,908	08/05/03		21036	1765	7369

Title: **HETEROEPITAXIAL DIAMOND AND DIAMOND NUCLEI PRECURSORS**

Address to:  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**37 CFR 1.97(b)**

1. ☒ The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application other than a continued prosecution application under 37 CFR 1.53(d); within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; before the mailing of a first Office Action on the merits, or before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.

**37 CFR 1.97(c)**

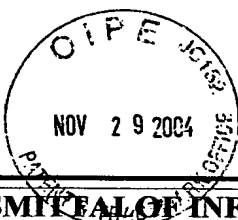
2. ☐ The Information Disclosure Statement submitted herewith is being filed after the period specified in 37 CFR 1.97(b), provided that the Information Disclosure Statement is filed before the mailing date of a Final Action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by one of:

☐ the statement specified in 37 CFR 1.97(e);

**OR**

☐ the fee set forth in 37 CFR 1.17(p).

**BEST AVAILABLE COPY**



**TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT**  
(Under 37 CFR 1.97(b) or 1.97(c))

Docket No.  
MSU 4.1-596

In Re Application: **Brage Golding, Connie Bednarski-Meinke and Zhong-ning Dai**

Application No.	Filing Date	Examiner	Customer No.	Group Art Unit	Confirmation No.
10/634,908	08/05/03		21036	1765	7369

Title: **HETEROEPI TAXIAL DIAMOND AND DIAMOND NUCLEI PRECURSORS**

**Payment of Fee**

(Only complete if Applicant elects to pay the fee set forth in 37 CFR 1.17(p))

- ☐ A check in the amount of \_\_\_\_\_ is attached.
- ☒ The Director is hereby authorized to charge and credit Deposit Account No. 13-0610 as described below.
- ☐ Charge the amount of \_\_\_\_\_
- ☒ Credit any overpayment.
- ☒ Charge any additional fee required.
- ☐ Payment by credit card. Form PTO-2038 is attached.

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

**Certificate of Transmission by Facsimile\***

I certify that this document and authorization to charge deposit account is being facsimile transmitted to the United States Patent and Trademark Office (Fax. No. \_\_\_\_\_)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Typed or Printed Name of Person Signing Certificate

**Certificate of Mailing by First Class Mail**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on

11/26/04

\_\_\_\_\_  
(Date)



Signature of Person Mailing Correspondence

Jessica R. House

\_\_\_\_\_  
Typed or Printed Name of Person Mailing Certificate

**\*This certificate may only be used if paying by deposit account.**

  
Signature

Dated: 11/26/04

**Ian C. McLeod**  
Registration No. 20,931  
McLeod & Moyne, P.C.  
2190 Commons Parkway  
Okemos, Michigan 48864  
Phone No. (517) 347-4100  
Customer No. 21036

cc:



MSU 4.1-596

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant : Brage Golding, Connie Bednarski-Meinke and  
Zhong-ning Dai

Serial No.: 10/634,908

Filed : August 5, 2003

For : HETEROEPITAXIAL DIAMOND AND DIAMOND NUCLEI  
PRECURSORS

COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, VA 22313-1450

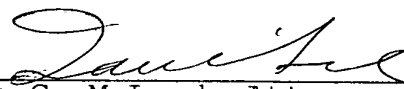
Sir:

**INFORMATION STATEMENT UNDER  
RULE 1.97 and 1.98**

Provided herewith are copies of patents and publications as listed in the attached form PTO-1449. A concise explanation of the relevance of each reference listed in form PTO-1449 is contained in the above-captioned specification as filed.

Applicant respectfully asserts that the substantive provisions of 37 CFR 1.97 and 37 CFR 1.98 are met by the provision of the foregoing statement.

Respectfully,

  
\_\_\_\_\_  
Ian C. McLeod, Attorney  
Registration No. 20,931

Date: 11/26/04

McLEOD & MOYNE, P.C.  
2190 Commons Parkway  
Okemos, Michigan 48864

(517) 347-4100  
Fax: (517) 347-4103

+

NOV 29 2004

Approved for use through 10/31/99. OMB 0651-0031  
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

NOV 29 2004

**Complete if Known**

*(use as many sheets as necessary)*

Application Number	
Filing Date	
First Named Inventor	Brage Golding
Group Art Unit	
Examiner Name	
Attorney Docket Number	MSU 4.1-596

Sheet 1 of

[illegible][illegible]

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → ☐

PTO/SB/08B (10-96)

Approved for use through 10/31/99. OMB 0651-0031  
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO		<b>Complete If Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	
		Filing Date	
		First Named Inventor	Brage Golding
		Group Art Unit	
		Examiner Name	
Sheet 1 of	Attorney Docket Number	MSU 4.1-596	

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.†	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	12
	A1	Ohtsuka, K., et al., Jpn. J. Appl. Phys. 36, 1214 (1997)	
	B1	Schreck, M., et al., Appl. Phys. Lett. 74, 650 (1999)	
	C1	Tsubota, T., et al., Diamond and Related Materials 9, 1380 (2000)	
	D1	Hormann, et al., Diamond and Related Materials 9, 256 (2000)	
	E1	Dai, Z., et al., Proc. Mat. Res. Soc., P11.35, 684 (2001)	
	F1	Wolter, S., et al., Appl. Phys. Lett. 62, 1215 (1993)	
	G1	Jiang, X., Diamond and Related Materials 2, 1112 (1993)	
	H1	Wild, C., et al., Diamond and Related Materials 3, 373 (1994)	
	I1	Ohtsuka, K., et al., Jpn. J. Appl. Phys. Pt. 2, 35 (1996) L1072	
	J1	Ohtsuka, K., et al., Jpn. J. Appl. Phys. Pt. 2, 36 (1997) L1214 Same A1	
	K1	Schreck, M., et al., Appl. Phys. Lett. 78, 192 (2001)	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

† Unique citation designation number. ‡ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

(Information Disclosure Statement by Applicant (PTO/SB/08B) Other Prior Art—NonPatent Literature Documents (1449A/PTO) [6-2.1]—page 1 of 1)

Please type a plus sign (+) inside this box → ☐

PTO/SB/08B (10-96)

Approved for use through 10/31/99. OMB 0651-0031  
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>			<b>Complete if Known</b>	
Application Number				
Filing Date				
First Named Inventor	Brage Golding			
Group Art Unit				
Examiner Name				
Attorney Docket Number	MSU 4.1-596			

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.†	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T2
	L2	Yugo, S., et al., Appl. Phys. Lett. 58, 1036 (1991)	
	M2	Loloee, R., et al., Phil. Mag. A 81, 261 (2001)	
	N2	Wolfing, B., et al., J. Phys: Condensed Matter 11, 2669 (1999)	
	O2	Vargas, R., et al., Appl. Phys. Lett. 65, 1094 (1994)	
	P2	Kronberg, M.L., Acta Metall. 5, 507 (1957)	
	Q2	Kuo, K.P., et al., Diamond and Related Materials 6, 1097 (1997)	
	R2	Kulisch, W., et al., Physica Status Solidi A 154, 155 (1996)	
	S2	Stockel, et al., J. Appl. Phys. 79, 768 (1996)	
	T2	Whitfield, M.D., et al., Diamond and Related Material 9, 305 (2000)	

Examiner Signature	Date Considered
--------------------	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

† Unique citation designation number. ‡ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

(Information Disclosure Statement by Applicant (PTO/SB/08B) Other Prior Art—NonPatent Literature Documents (1449A/PTO) [6-2.1]—page 1 of 1)

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☐ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**